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**IS 13876 ( Part 1 ) : 1993**

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भारतीय मानक

# तरल पावर घटकों के मुहरांकन की मार्गदर्शिका

## भाग 1 सिलिंडर

*Indian Standard*

# GUIDE FOR MARKING SYSTEM FOR FLUID POWER COMPONENTS

## PART 1 CYLINDERS

UDC 621·226 - 777

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BUREAU OF INDIAN STANDARDS
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG
NEW DELHI 110002

*December* 1993

**Price Group 2**

Basic Fluid Power Sectional Committee, PE 14

## FOREWORD

This Indian Standard was adopted by the Bureau of Indian Standards, after the draft finalized by the Basic Fluid Power Sectional Committee had been approved by the Production Engineering Division Council.

This standard is being issued with a view to establishing a uniform system of marking on fluid power components. Marking on cylinders has been taken up based on the present practice followed in the industry. As a result of adoption of this standard it is hoped that marking on fluid power cylinders of different makes would be similar and would serve as a guide to the manufacturer and user.

Despite standardization attempt in the area of fluid power cylinders, the special purpose cylinders are growing, which is inevitable. This fluid power element is completely commended by its end usage. Thus every time a cylinder is custom built to meet a particular requirement.

This standard consists of the following three parts under the general title 'Guide for marking system for fluid power components:

Part 1 Cylinders

Part 2 Valves

Part 3 Pumps and motors

*Indian Standard*

# GUIDE FOR MARKING SYSTEM FOR FLUID POWER COMPONENTS

## PART 1 CYLINDERS

## 1 SCOPE

This standard lays down the system for marking of fluid power cylinders. Marking on the body may be integral with the body or on an anodized plate securely fixed to the body. Cylinders, which are special in nature like rotating cylinders, rodless cylinders, etc, are not covered in this standard.

These specified markings serve as guide to identify the manufacturer and the component, as well as to assist in proper application.

## 2 REFERENCES

The following Indian Standards are necessary adjuncts to this standard:

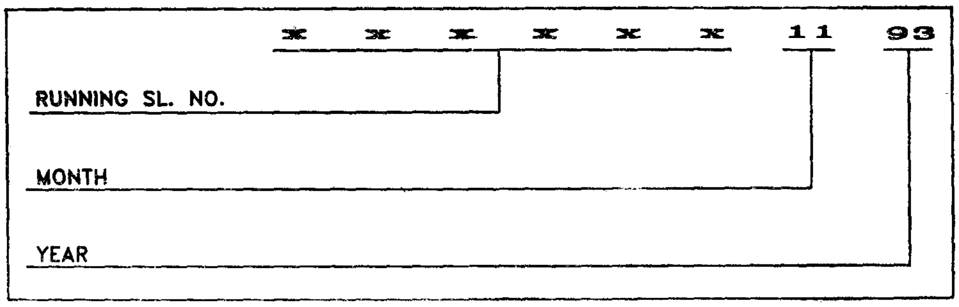
| *IS No.* | *Title* |
|---|---|
| 7513 : 1974 | Graphical symbols for fluid power systems |
| 10416 : 1992 | Fluid power systems and components — Vocabulary ( *first revision* ) |
| 11154 : 1984 | Dimensions for name plates |

## 3 MARKING

### 3.1 Identification Number

Cylinder shall be marked with the running Sl No., month and year of manufacture.

*Example* :



**3.1.1** Manufacturer's name or trade-mark may also be marked along with identification number.

### 3.2 Part Number

**3.2.1** *Type of Cylinder*

The type of cylinder shall be designated by the following letters:

H — General Hydraulic Cylinders

P — General Pneumatic Cylinders

T — Telescopic Cylinders

R — Ram Cylinders

**3.2.2** Marking on cylinder may also include working media and temperature in °C.

**3.2.3** *General Hydraulic and Pneumatic Cylinders*

Following parameters shall be considered for marking these types of cylinders:

a) Type H/P — Hydraulic/Pneumatic

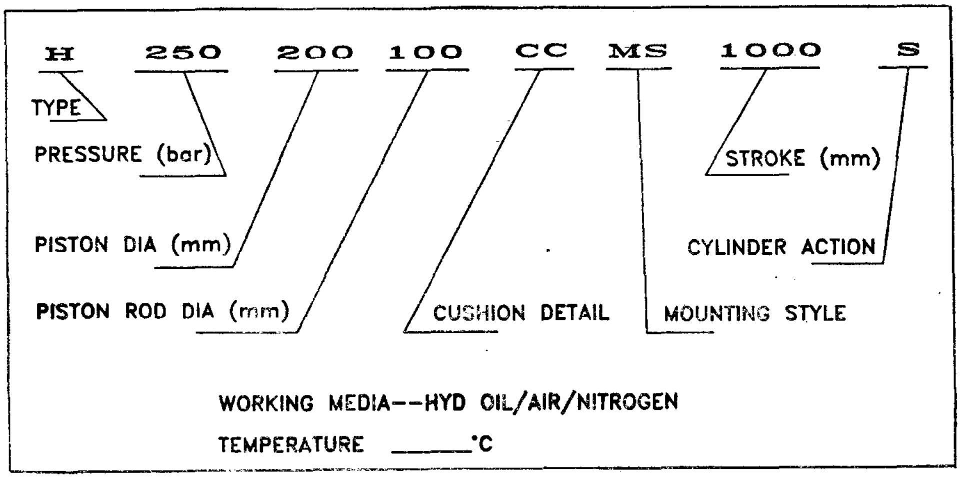
b) Pressure xx — bar

c) Piston diameter xx — in mm

d) Rod diameter xx — in mm

| | | |
|---|---|---|
| e) Cushion details | CC | — Cap end cushioned |
| | HC | — Head end cushioned |
| | NC | — Non-cushioned |
| | BC | — Both ends cushioned |
| f) Mounting Styles | MS | — End Angles mounting |
| | MF1 | — Rectangular flange head mounting |
| | MT | — Male Trunnion |
| | MSP | — Special type |
| g) Stroke | xx | — in mm |
| h) Cylinder action | S | — Single acting |
| | D | — Double acting |

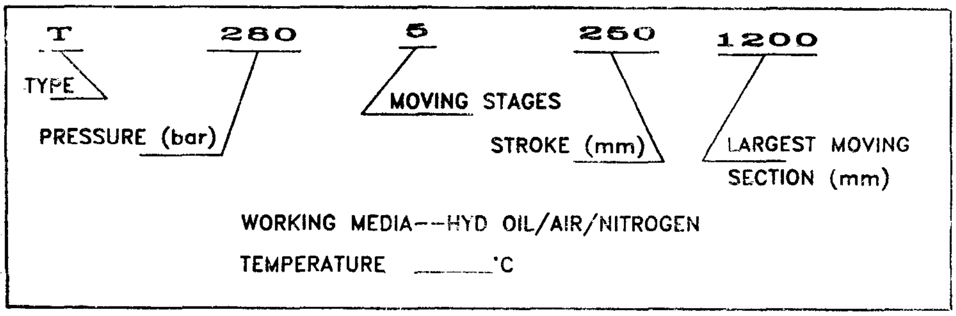
*Example:*



**3.2.4** *Telescopic Cylinder*

| | | |
|---|---|---|
| a) Type | T | — Telescopic Cylinder ( T ) |
| b) Pressure | xx | — bar |
| c) Moving stages | xx | — in numbers |
| d) Largest moving section | xx | — in mm |
| e) Stroke | xx | — in mm |

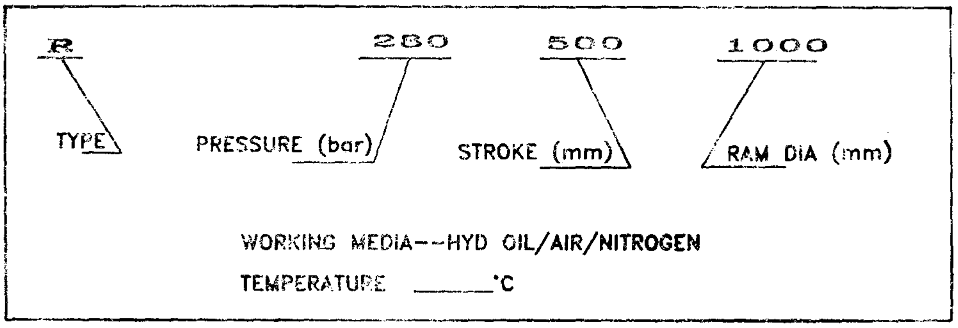
*Example*:



**3.2.5** *Ram Cylinder*

| | | |
|---|---|---|
| a) Type | R | — Ram Cylinder (R) |
| b) Pressure | xx | — bar |
| c) Ram diameter | xx | — in mm |
| d) Stroke | xx | — in mm |

*Example:*



## 4 METHOD OF APPLYING MARKING

Markings may be cast, forged, stamped on the body or stamped/engraved on an anodized plate securely fastened to the bodies. The name plate used for marking shall be as per IS 11154 : 1984.

NOTES

1 Where steel stamps are used, care should be taken to ensure that the marking does not cause cracks or distort the body.

2 Cast lettering on the body that is obliterated during manufacture may be replaced by weld deposition or stamping at the option of the manufacturer. When stamping is used, care must be taken to ensure that the requirements of Note 1 are met with.

## 5 ADDITIONAL MARKINGS

Nothing in this standard shall be construed as prohibiting the use of additional markings such as 'Made in India', pattern numbers, patent numbers, dates, special design indications, etc. All additional markings shall be applied in such a manner as to avoid confusion with specified markings.

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BUREAU OF INDIAN STANDARDS

Headquarters:

Manak Bhavan, 9 Bahadur Shah Zafar Marg, New Delhi 110002
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|---|---|
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